TURKEY VULTURES DECLINE AT A TRADITIONAL ROOSTING SITE

Daniel M. Taylor[1]

ABSTRACT.—A population decline of about 50% from 1974 to 1981 for Turkey Vultures (*Cathartes aura*) was found at a traditional roosting site at Malheur National Wildlife Refuge in Oregon. This decline may have been due to a region-wide reduction in this species, to the possible but improbable formation of a new but undiscovered roost, or to a reduction in feeding opportunities caused by the decreased use of the refuge by cattle.

Concern has been expressed in some regions of the United States over population declines of Turkey Vultures (*Cathartes aura*), resulting in the placement of this species on the National Audubon Society's Blue List twice since 1972 (Tate 1981). Vulture populations appear to be increasing in parts of the east and decreasing in some areas of the west (Tate and Tate 1982), but more quantitative data are needed.

Brown (1976) analyzed winter population trends for Turkey and Black Vultures (*Coragyps atratus*) from Christmas Bird Count data from 1950 to 1973 for 16 eastern states, Arizona, Texas, California, and the District of Columbia. He found that Turkey Vultures had declined steadily over this 24-year period in all of these states except California. He attributed the exception of California to large vulture populations from areas censused only in recent years.

Since at least 1935, Turkey Vultures have traditionally roosted at the P Ranch Station at the south end of Malheur National Wildlife Refuge, Harney County, Oregon (Davis 1974). The vultures roost in a row of tall cottonwoods (*Populus* sp.) but use a metal observation tower for pre- and postroosting. They can be accurately censused in both places.

In 1973 Davis (1974) censused the vultures at P Ranch from late spring to late summer and found a mean of 104 birds per night (range 68–151: N = 28). There was some seasonal variation, with more birds in the spring and late summer. Her census periods from 21 May to 20 June and 21 June to 20 July had high counts of 106 and 110, respectively. There was a mean of 90 birds from seven counts during these periods.

At P ranch I made 16 censuses of Turkey Vultures in 1981 from 23 May to 2 July and 22 counts in 1982 from 25 May to 7 July. In 1981 I counted only the peak number of birds on the tower, but the next year I also counted additional birds in the cottonwoods. The mean in 1981 was 46.6 birds (range 35–54), and the following year it was 54.0 (range 33–74) altogether, with 49.6 birds (range 33–69) on just the tower. The means of these two years is little more than half that of 1973, and there is almost no overlap between the ranges of the 1973 counts and those of 1981 and 1982.

The only count between 1973 and 1981 that I am aware of was one of 92 vultures on 1 July 1976, indicating populations were still comparatively high that year.

There are at least three possible reasons for this population decrease. One is that there has been an overall decrease of vultures in the region. This would support Brown's earlier findings (1976). Another possibility is the establishment of new roost sites, but no new large roost sites are known in the area, which receives considerable attention from amateur bird watchers. A third explanation for this population decrease is that it is a local decline caused by the cutting back in the number of cattle on the refuge, with a shift to greater winter use. In 1972-73 Animal Unit Months (AUMs) on the refuge were 126,593 (Malheur National Wildlife Refuge, unpublished report). This has decreased to 45,000 AUMs in 1981 and 46,000 AUMs in 1982. Since vultures are known to scavenge dead cattle (Bent 1937, Burleigh 1972), the reduction of this potential food source might be responsible for the vulture decline.

[1]Department of Biology, Idaho State University, Pocatello, Idaho 83209. Present Address: 2903 Greenvale Place, Nampa, Idaho 83651.

Whatever the reason, this summer population of vultures has evidently suffered a large decrease since 1973. Because this species may be in trouble in general, and many roosts can easily be censused, efforts should be made to do so over the entire range of the vulture to determine population trends.

I thank the personnel of Malheur National Wildlife Refuge for providing housing and support while this study was conducted. The study was funded in part by the nongame program of the Oregon Department of Fish and Wildlife.

LITERATURE CITED

BENT, A. C. 1937. Life histories of North American birds of prey (Part 1). U.S. Nat Mus. Bull. 167: 1–407.

BROWN, W. H. 1976. Winter population trends in Black and Turkey vultures. Amer. Birds 30: 909–912.

BURLEIGH, T. D. 1972. Birds of Idaho. Caxton Printers, Caldwell, Idaho. xiii + 467 pp.

DAVIS, D. 1974. Roosting behavior of the Turkey Vulture (*Cathartes aura*). Unpublished thesis, Idaho State University, Pocatello, Idaho. 93 pp.

TATE, J., JR. 1981. The blue list: the first ten years. Amer. Birds 35: 3–10.

TATE, J., JR., AND D. J. TATE. 1982. The blue list for 1982. Amer. Birds 36: 126–135.